

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 06-296595

(43)Date of publication of application : 25.10.1994

(51)Int.Cl. A61B 5/0408
A61B 5/0492
A61B 5/0478
// H01B 5/14

(21)Application number : 05-090291

(71)Applicant : MATSUSHITA ELECTRIC IND CO LTD

(22)Date of filing : 16.04.1993

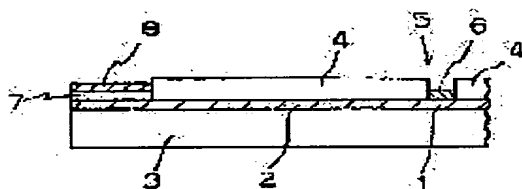
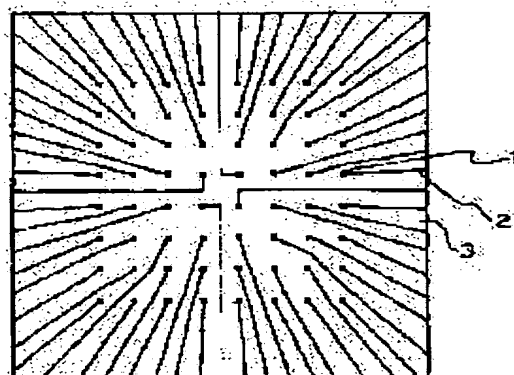
(72)Inventor : SUGIHARA HIROKAZU
TAKEYA MAKOTO
MITSUMATA TADAYASU

(54) UNIFIED COMPLEX ELECTRODE

(57)Abstract:

PURPOSE: To make it possible to cultivate neurocytes and to realize simultaneous multipoints measurement of electric activity of the neurocytes by forming the unified complex electrode to have the specific area of electrode and the specific surface resistance of electrode part.

CONSTITUTION: This unified complex electrode has the plural number of electrodes 1 that have mutually the same interval between the nearest electrodes on the insulated board 3, and the wiring part is formed by wiring lead line 2 from electrode 1 nearly radially. The insulating layer 4 covering the lead line 2 is formed, the electrode area is set as $\geq 3 \times 2 \mu\text{m}$ and $\leq 4 \times 104 \mu\text{m}$, and the surface resistance of the electrode part is set as $\leq 10 \Omega/\text{cm}^2$. In the unified complex electrode, distance between the nearest electrodes is set as $\geq 10 \mu\text{m}$ and $\leq 1000 \mu\text{m}$. In addition, the insulating layer 4 covering the lead line 2 has a dent n each electrode, and is formed on almost all the surface of the insulating board 3 except the region near to the contact point of lead line 2 with their outer circuit. In addition, the plural number of electrode centers are set at each crossing point of the grid that is composed of 8×8 .



LEGAL STATUS

[Date of request for examination]

30.10.1997

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]	3101122
[Date of registration]	18.08.2000
[Number of appeal against examiner's decision of rejection]	
[Date of requesting appeal against examiner's decision of rejection]	
[Date of extinction of right]	

Copyright (C); 1998,2000 Japan Patent Office